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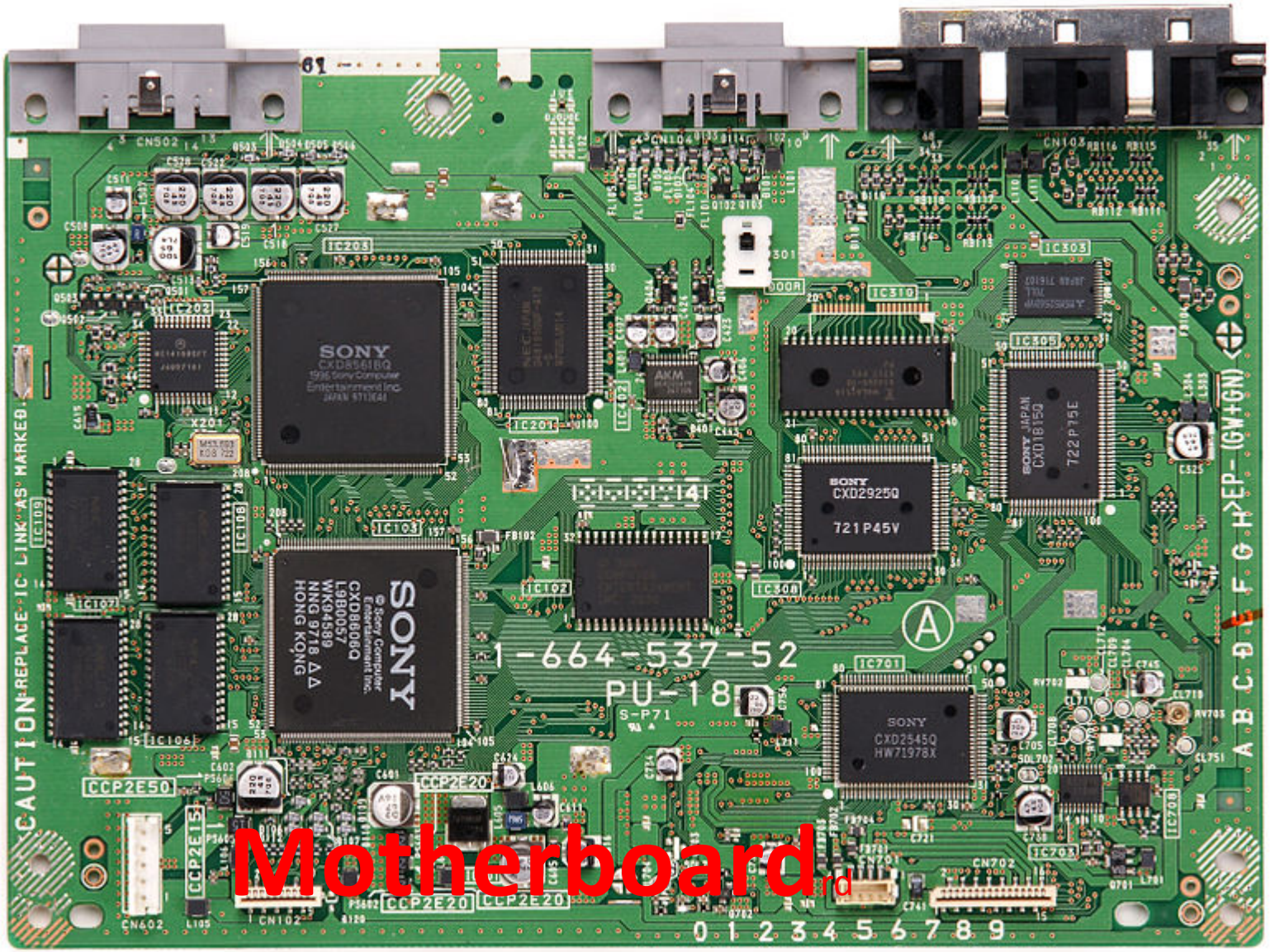
intel
CPU

CPU

CPU is the abbreviation for ***Central Processing Unit.*** Sometimes referred to simply as the *CENTRAL PROCESSOR*, but more commonly called *PROCESSOR,* the CPU is the brains of the computer where most calculations take place.

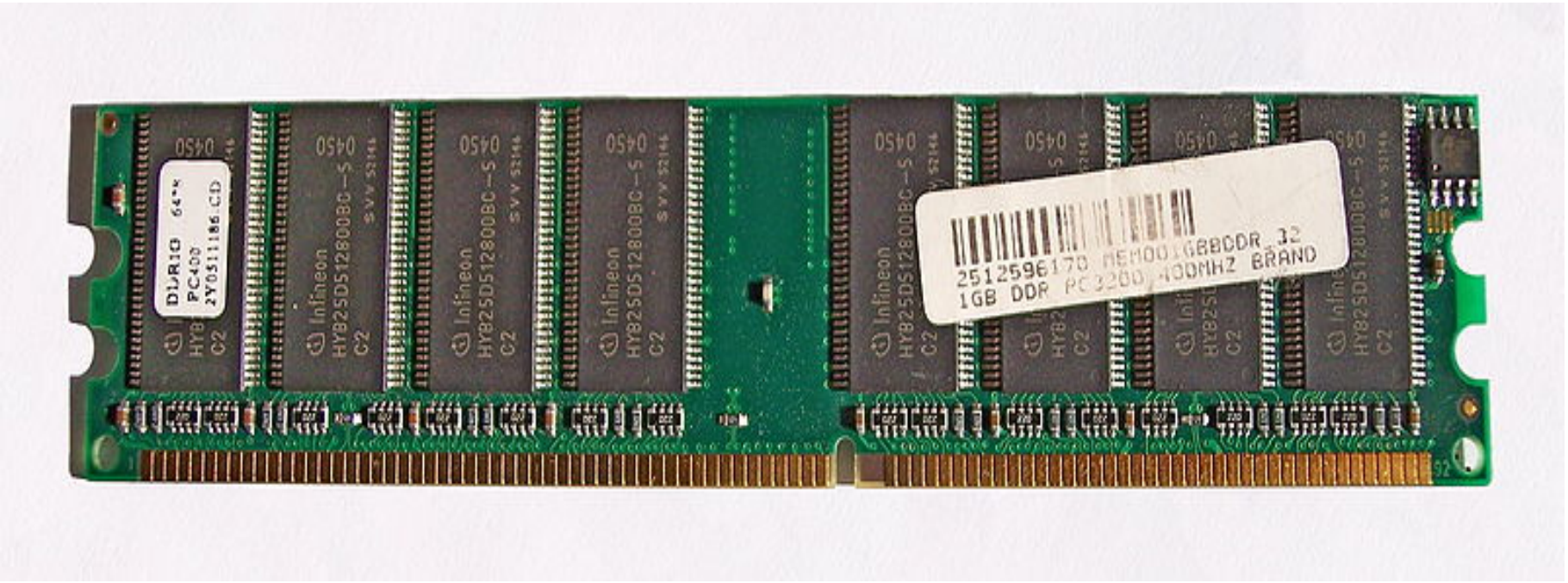
- The computer's brain or heart, the CPU is a computer's main chip. The CPU is really nothing more than an incredibly fast and powerful calculator.



Motherboard.rd

Motherboard

The main piece of circuitry in a computer. Everything connects to or is wired to the motherboard.



Random access memory (RAM)

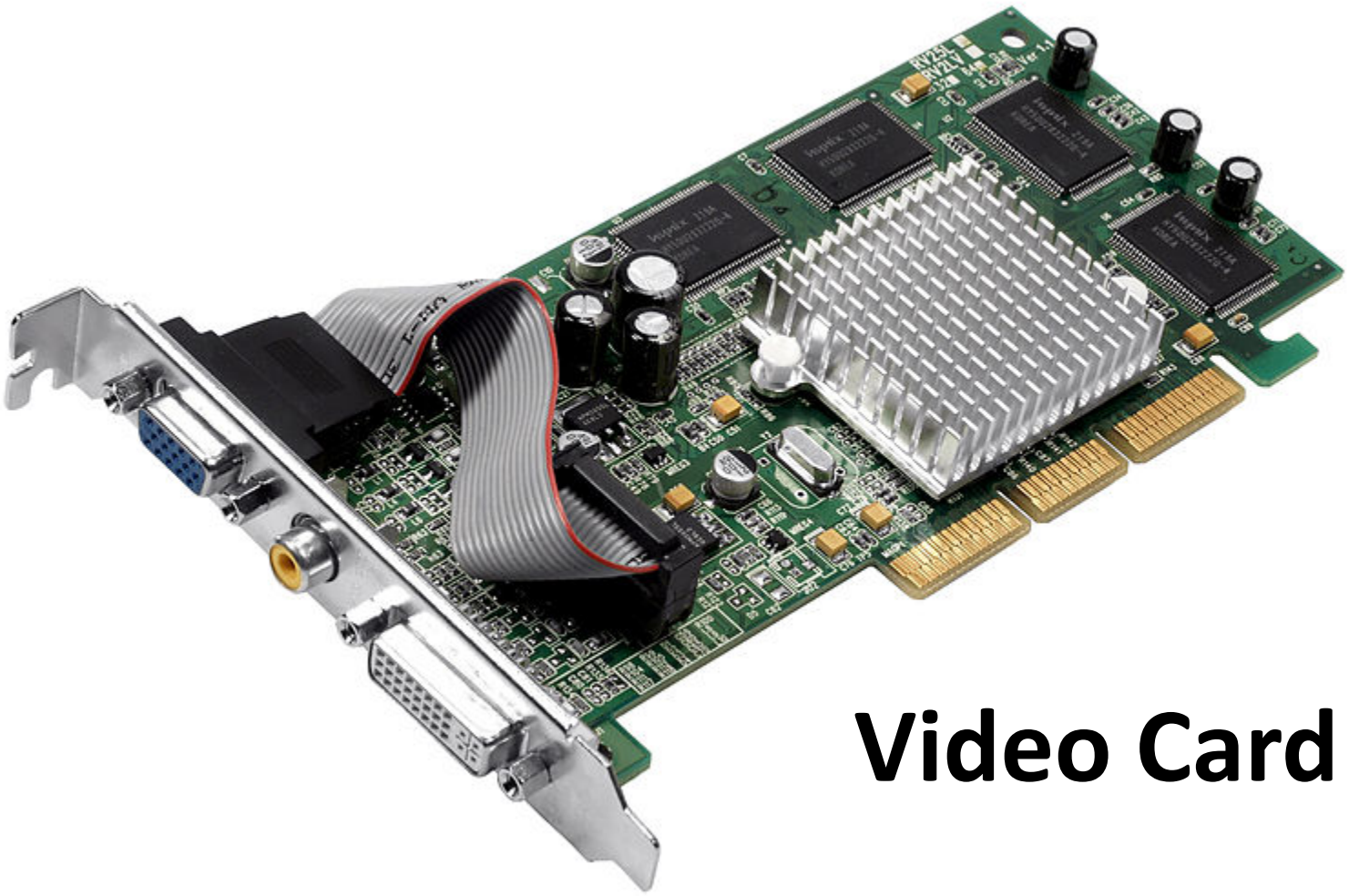
RAM

***R**andom **A**ccess Memory* is the main memory that stores data on the computer.

A computer's temporary storage place, where it gets its work done. For example, when you use a word processor to type a letter, the letter is stored in the computer's memory

It is a volatile memory which means it requires electricity to store data, so when the computer is powered down (or unplugged) all the memory is wiped.

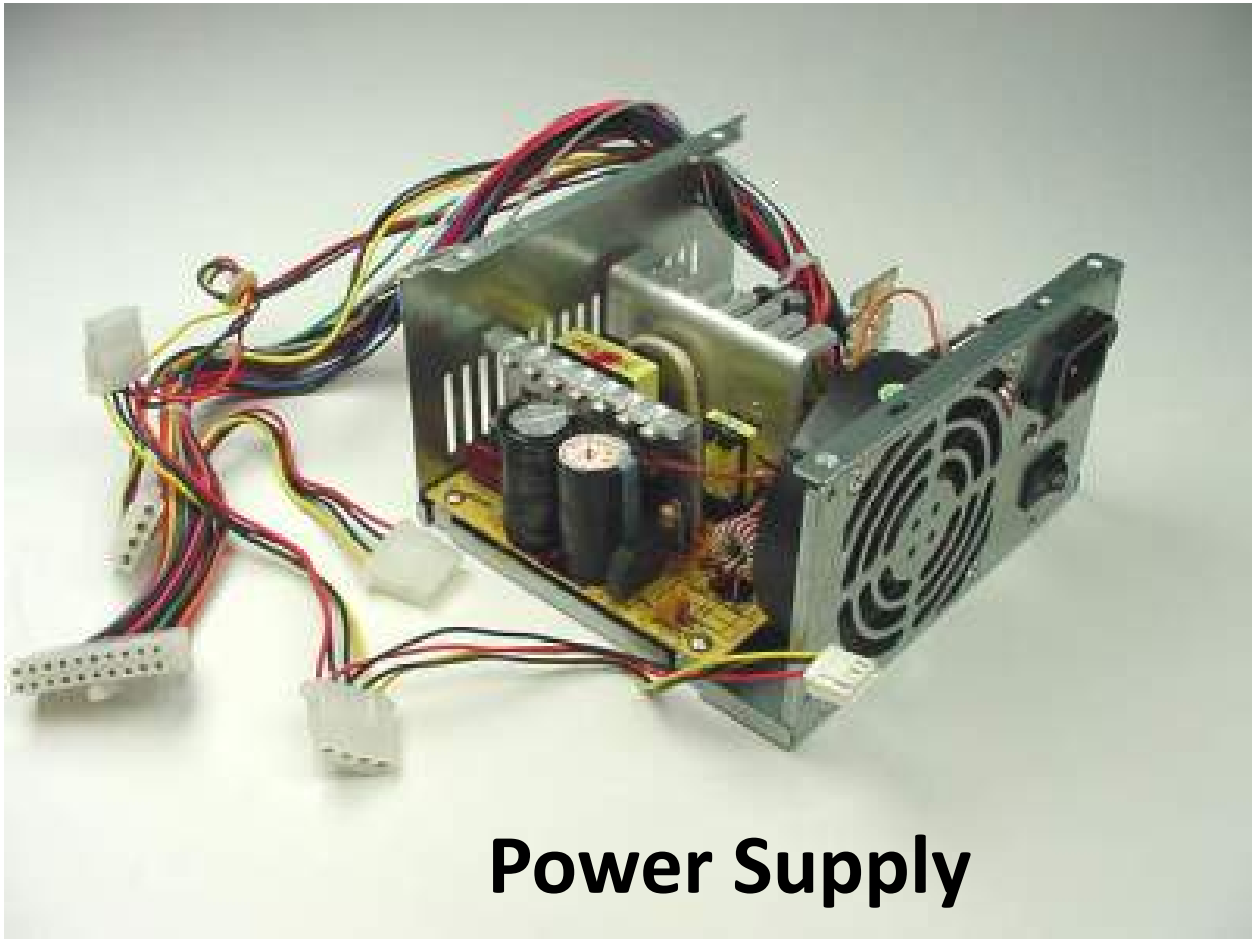
When the power goes off, anything stored in RAM is lost.



Video Card

Video or Graphics Expansion Cards

A video card or adapter is what generates the images and text displayed on a monitor. Computers come with a built-in video card, but some people like to upgrade their original video card with faster, more powerful video cards.


Power Supply

Power Supply

The power supply **supplies the power that the computer needs.** All wires going from the power supply go either directly to the computer components or to the motherboard. The power supply sits at the top of the case.

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3.5 SERIES

Hard Drive

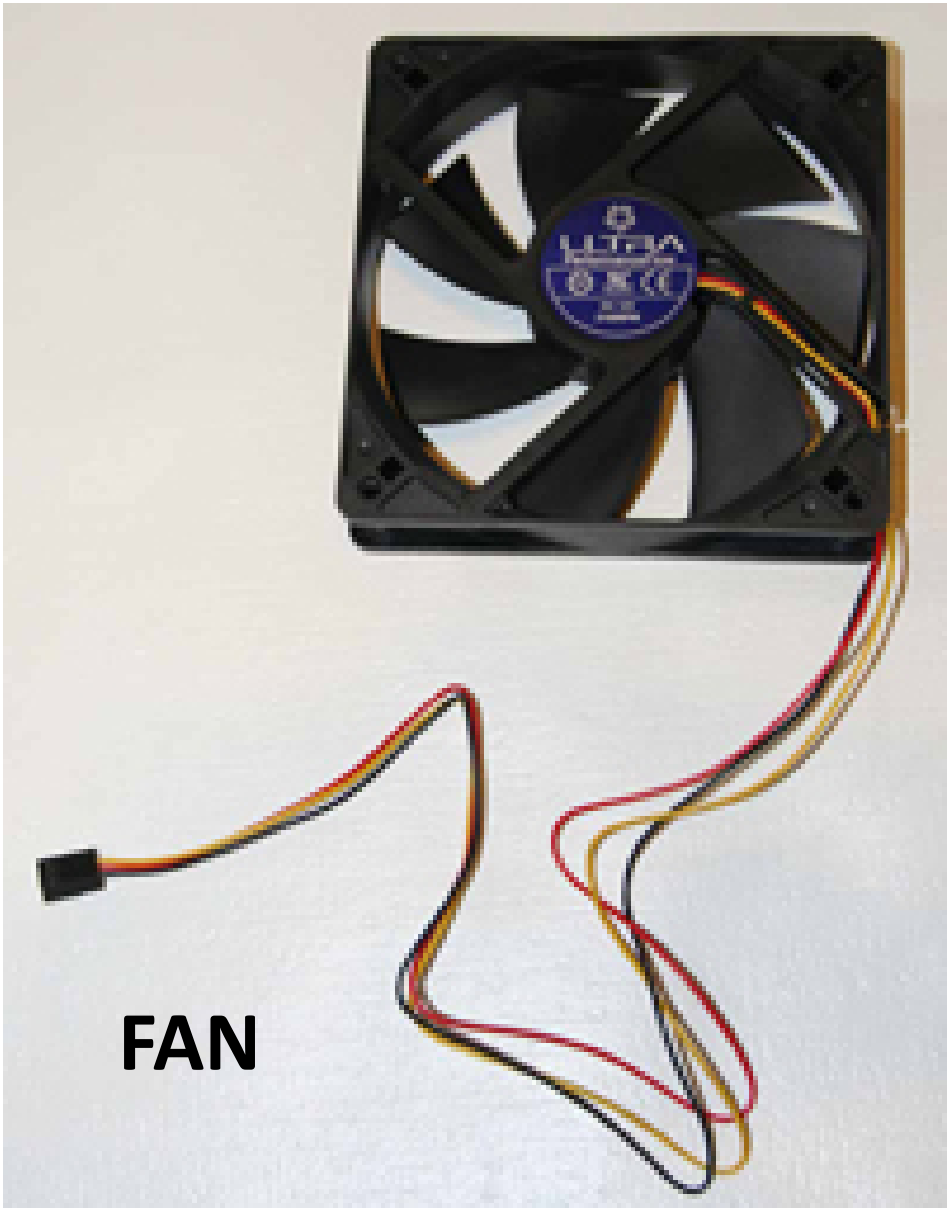
Hard Drive

This is the computer’s long-term memory; things stored here are remembered even after the power's been turned off. The hard drive can store a large quantity of data, but the data cannot easily be removed from the computer. The hard drive is much slower than RAM.

Optical Drive

Optical Drives

- There are two types of optical drives
  - DVD drive which allows the computer to run DVD's
  - CD-ROM which allows the computer to run CD-ROMS


FAN

Fans

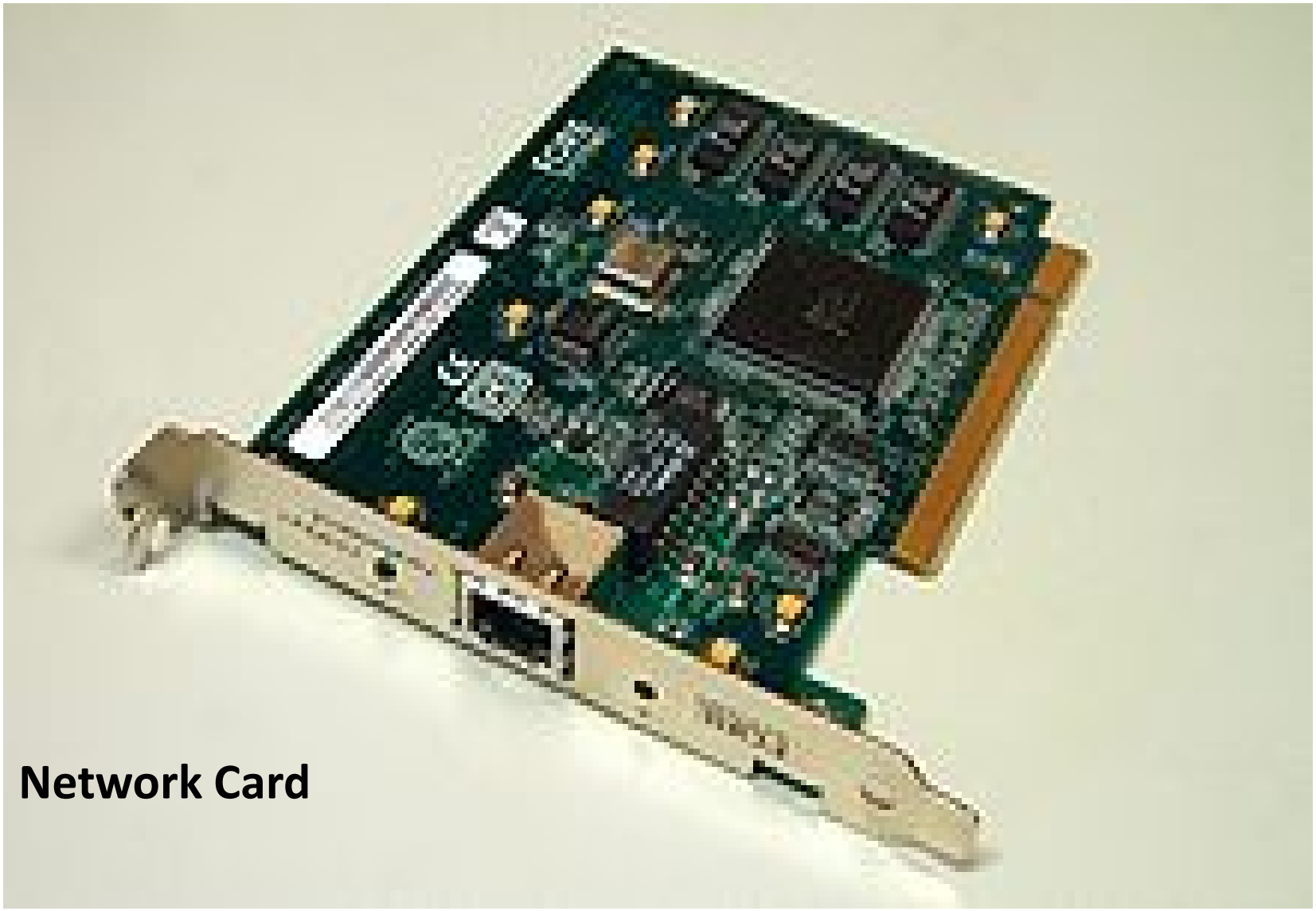
One issue with computers (especially laptops) is that the can overheat easily. To help reduce overheating fans are used. The main fan is placed on the CPU because the CPU is prone to overheating. Actually, a thermal compound is put on top of the CPU, followed by a heat sink and finally the fan on top of all of this.

computer-hardware-explained.com
Line in
Microphone
Line Out (speaker)
Gaming Controller Port
PCI Connectors

Sound Card

Sound Card

The sound card is an adapter card that allows the computer to have extended sound capabilities, and for sound components to be used, for example, headphones.



Network Card

NIC Card

The Nic, or Network Interface card, allows the computer to connect to a network.

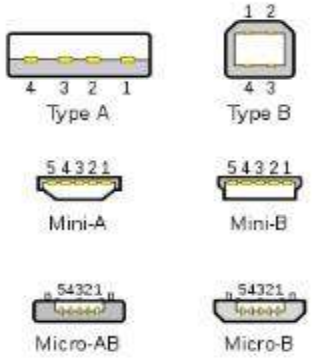
A Wireless Network Interface Card allows the computer to access the network wirelessly, using radio signals.

Floppy Drive

Floppy Disk Drive (FDD)

A FDD is a drive that can read and write on a removable floppy disk.

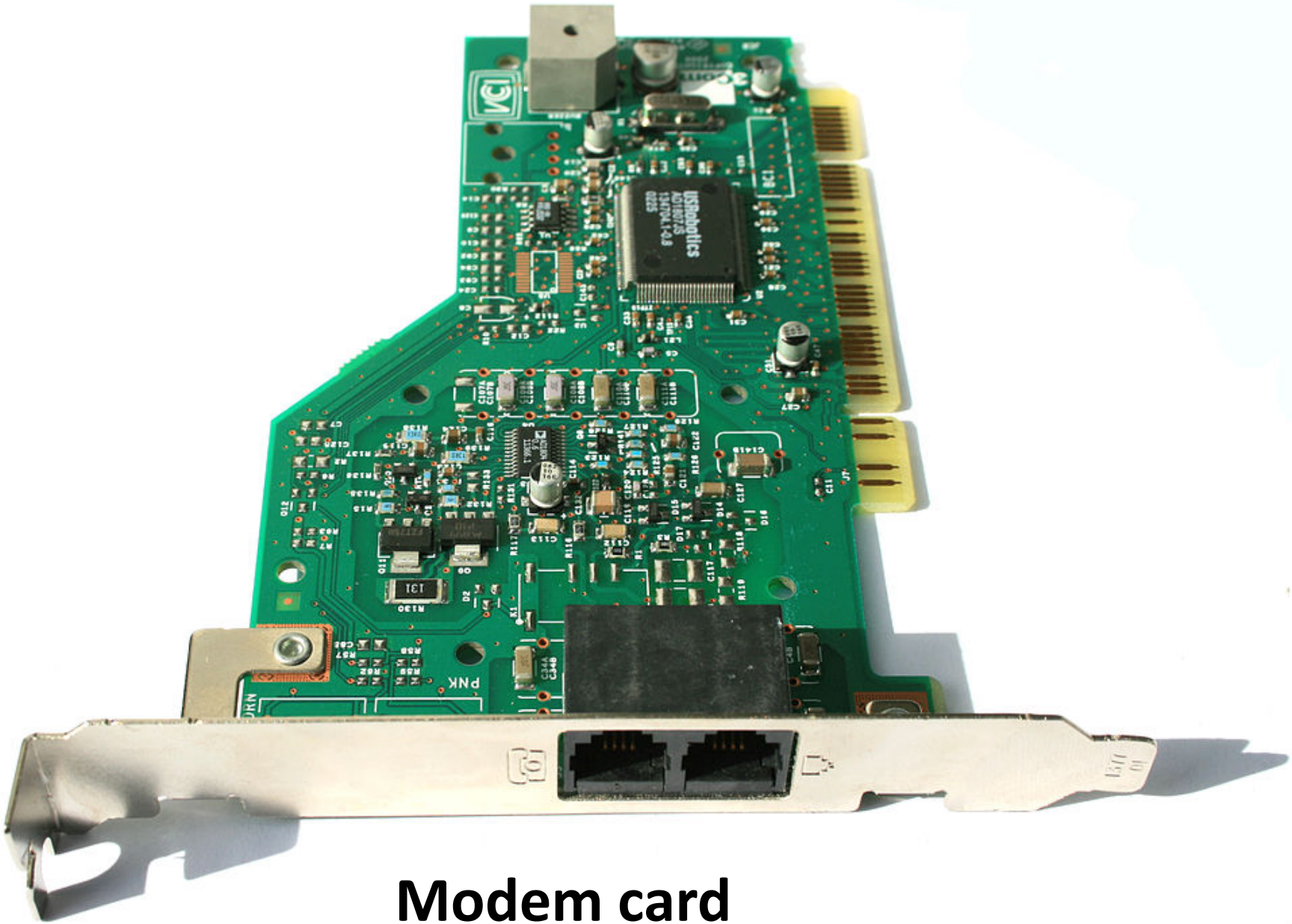
The floppy disk is a type of storage medium and back up device (rarely used now-a days)



(Images via Google Images Search)

Connectors/Cables

A connector is a cable that connects a peripheral device to a hardware component. For example printers, overhead projector, mouse, scanners etc..



Modem card

Modem Card

A modem allows computers to exchange information through ordinary telephone lines. Almost all computers already come with built-in modems, so you would probably only want to add a modem expansion card if the original modem in a computer breaks.

Power Cord

Power Cord

A cord to conduct power to an electrical appliance like the computer.

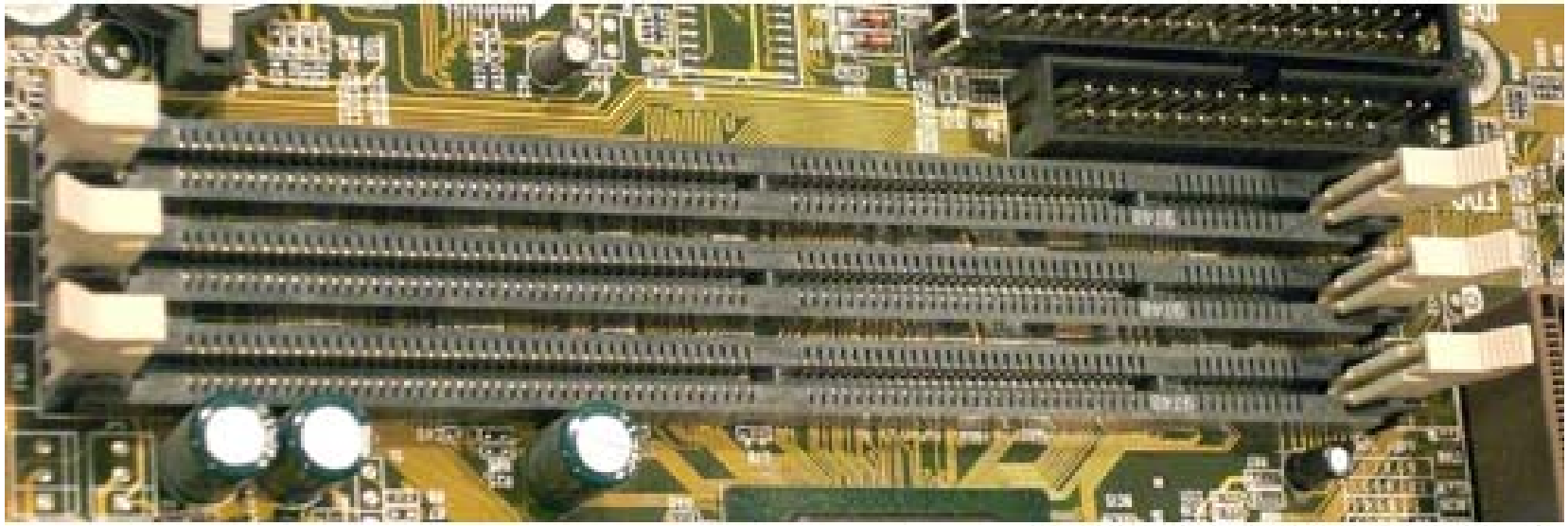
Ribbon Cable

IDE drives/ribbon cable

IDE drives use a ribbon cable to connect to the motherboard

IDE (Integrated Drive Electronics) is a standard electronic interface used between a computer motherboard's data paths or bus and the computer's disk storage devices. The IDE interface is based on the IBM PC Industry Standard Architecture 16-bit bus standard, but it is also used in computers that use other bus standards. Most computers sold today use an enhanced version of IDE called Enhanced Integrated Drive Electronics. In today's computers, the IDE controller is often built into the motherboard.

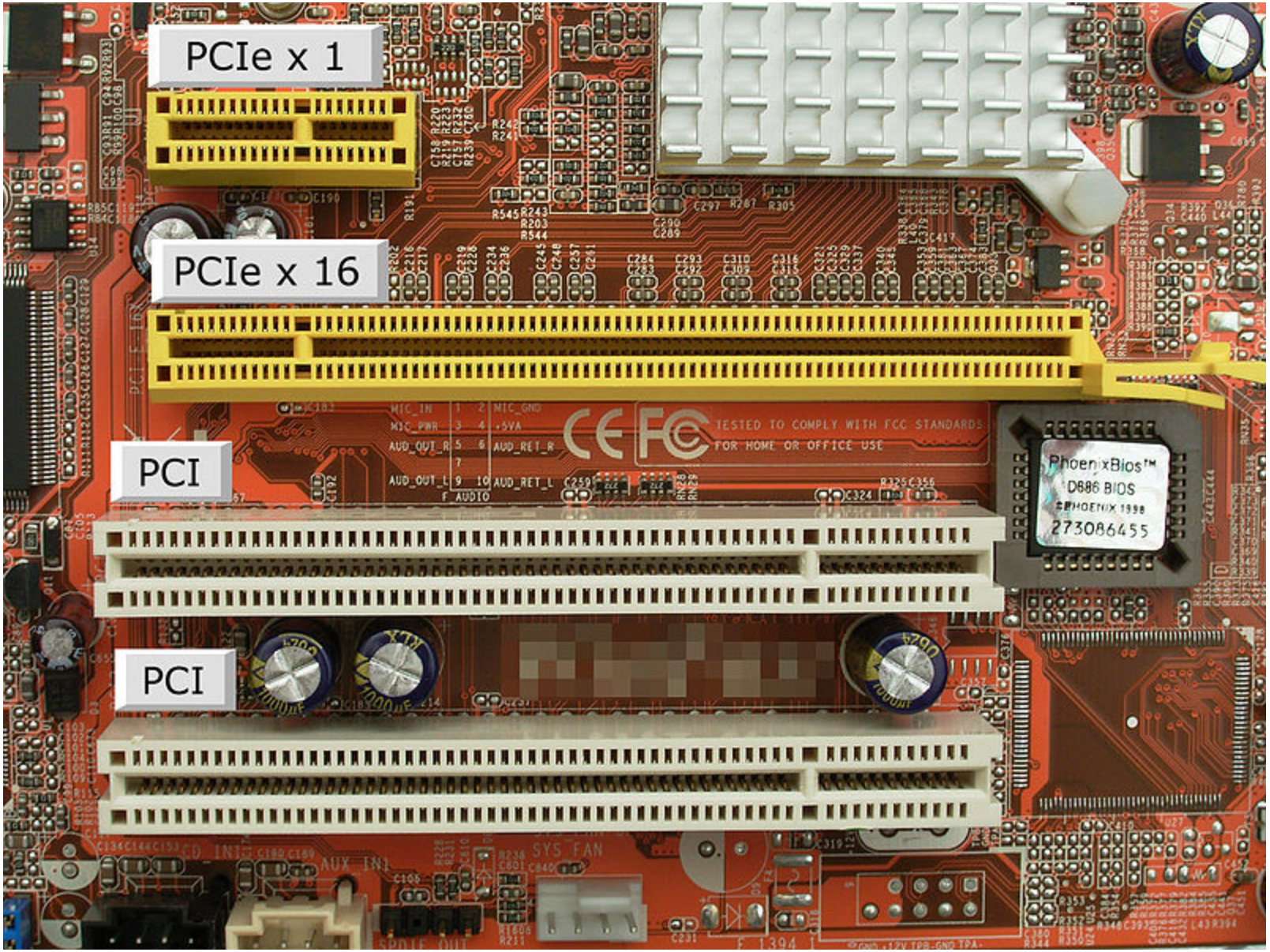
Computer Memory Slots



http://www.computerhope.com

Memory Slots

A **memory slot**, **memory socket**, or **RAM slot** is what allows computer memory (RAM) to be inserted into the computer. Depending on the motherboard, there will usually be 2 to 4 **memory slots** (sometimes more on high-end motherboards) and are what determine the type of RAM used with the computer.


PCIe x 1
PCIe x 16
PCI
PCI
MIC_IN
MIC_PWR
AUD_OUT_R
AUD_OUT_L
AUD_RET_R
AUD_RET_L
MIC_GND
+5VA
F_AUDIO
TESTED TO COMPLY WITH FCC STANDARDS
FOR HOME OR OFFICE USE
PhoenixBios™
D686 BIOS
PHOENIX 1998
273086455
CD_IN
AUX_IN
SYS_FAN

PCI Slots

Peripheral Component Interconnect, or PCI slots are general purpose slots that take a wide variety of cards, such as network cards and sound cards.

Mouse

In computing, a **mouse** is a pointing device that functions by detecting two-dimensional motion relative to its supporting surface. Physically, a mouse consists of an object held under one of the user's hands, with one or more buttons.

Speakers

Computer speakers are speakers external to a computer. Speakers contain amplifiers which vibrate to produce the sound. They come in many different forms. Some speakers are already attached to a computer. Some speakers are wireless. They work by Bluetooth.

Keyboard

In computing, a **keyboard** is a typewriter-style device, which uses an arrangement of buttons or keys, to act as mechanical levers or electronic switches